

Foam Wing Glider Pack

Materials Included:

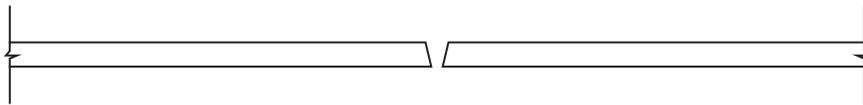
1/8" balsa wood sheets
1/16" balsa wood sheets
1" polystyrene foam
Sandpaper
HD Bond II
Modeling clay
Plane Art Decals
Template material
Graph paper

Equipment Needed:

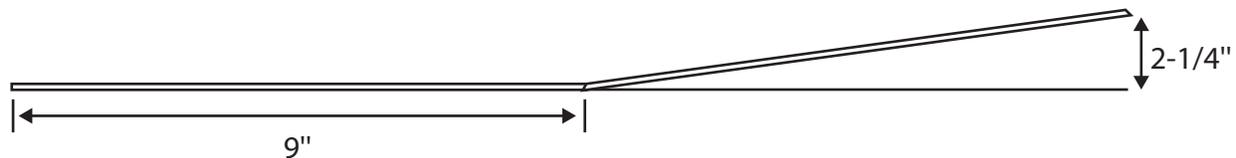
Foam Wing Cutter (17080)

Foam Wing Glider Instructions:

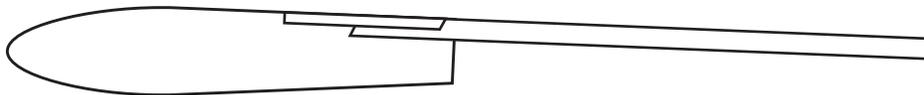
1. Using the Linder wing pattern, make a template to use with the Foam Wing Cutter. Refer to your *Foam Wing Cutter User Guide* for cutting a wing.
2. You will need to cut two wings approximately 9" long.
3. Sand or cut the ends of both wings (make sure you cut opposite ends) to form a dihedral angle for the wings. With one wing flat, the other wing should be elevated approximately 2-1/4".



4. When you are satisfied with the angles, glue the two wing sections together.

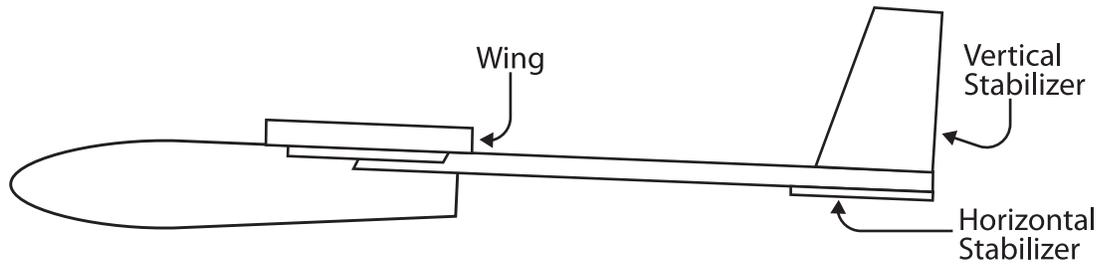


5. Using the patterns provided, mark and cut the fuselage, tailpiece, horizontal stabilizer, and wing support from the 1/8" balsa wood sheet.
6. Glue the tailpiece to the fuselage. Glue the wing supports to the fuselage and tailpiece as shown in the following figure.



7. Using the pattern provided, mark and cut the vertical stabilizer from the 1/16" balsa wood sheet.

8. Attach horizontal and vertical stabilizers to the tailpiece as shown in the following figure.

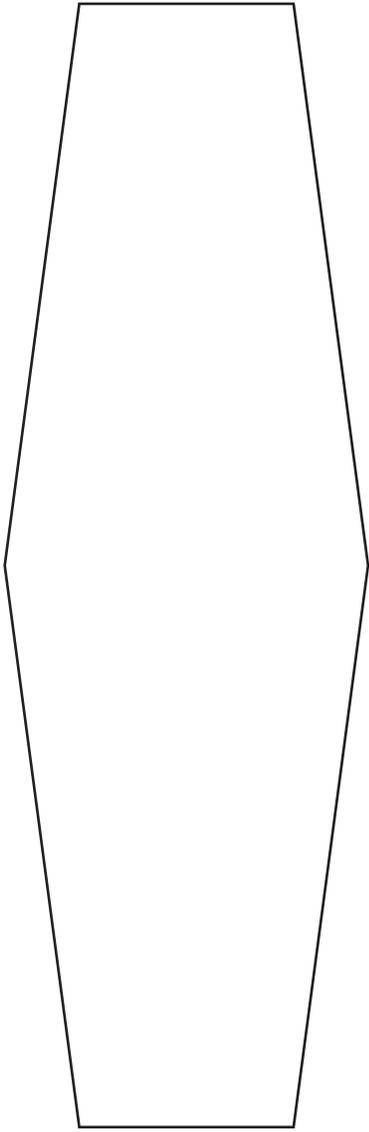


9. Attach the wings to the fuselage with the wing centered over the wing support as shown in the previous figure.
10. When the glued areas have dried, experiment with different amounts of clay on the nose cone to balance the weight of your glider. The following tips will help you fine-tune your glider.

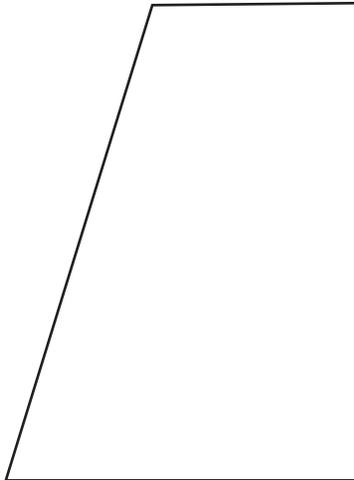
Tips:

1. Reinforce the trailing edge of the wing with masking tape. This will prevent the edge from chipping.
2. Coating the wings with a water-based wood finish will strengthen the wings.
3. The stabilizers can be made with foam, which will reduce the weight of your glider.
4. Rounding the leading edges of the balsa wood with sandpaper will enhance the glider's performance.

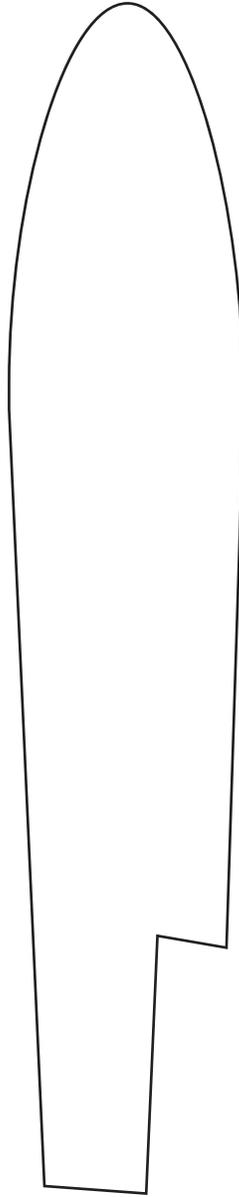
Foam Wing Glider Patterns



Horizontal Stabilizer



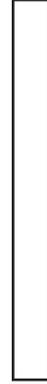
Vertical Stabilizer



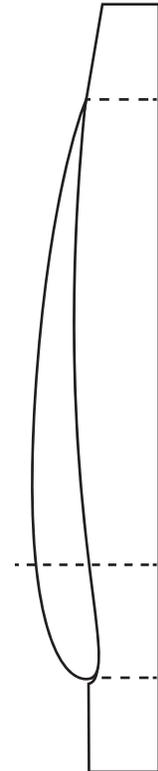
Fuselage



Tailpiece



Wing Support



Linder Wing